

**I CLAIM :**

1. A low carbohydrate sweetener comprising the following ingredients in wt. %

Ingredient	Range
Lo Han Kuo Extract	16.3 – 18.4, say about 17.4
Sucralose Liquid	83.7- 81.6, say about 82.6

2. The sweetener of claim 1, wherein said Lo Han Kuo Extract is provided as a powder comprising at least 80 wt. % of Mogroside made from Momordica fruit, and said Sucralose Liquid is an aqueous solution comprising about 24.5 to 25.6 wt % of Sucralose powder, and said Sucralose has the chemical formula of  $C_{12} H_{19} O_8 Cl_3$ .
3. The sweetener of claim 1 for providing the sweetening of a product selected from the group consisting of ice-cream, baked goods, candy, and beverages.
4. A low carbohydrate unflavored basic ice-cream composition comprising the following ingredients in wt. %:

Ingredients	Range	Best Mode
Lo Han Kuo Extract	0.014 – 0.018	0.016
Sucralose Liquid	0.072 – 0.080	0.076
CC305	0.200 – 0.270	0.235
Glycerin	0.900 - 1.100	1.000
Polydextrose	9.000 – 10.050	9.525
Whey Protein Concentrate	1.550 - 1.620	1.585
Egg Yolk Solids	2.000 - 3.500	2.750
Non Fat Dry milk Solids	2.800 - 3.200	3.000
Cream and Skim Milk	83.464 – 80.162	81.813

5. The ice cream composition of claim 4, containing flavoring in the amount of about 4.8 to 22.4 ml per liter of ice cream.
6. The ice cream composition of claim 4, containing Almond flavoring in the amount of 4.8 to 5.8 ml. per liter of ice cream.
7. The ice cream composition of claim 4, containing Coffee flavoring in the amount of 19.0 to 20.0 ml per liter of ice cream.
8. The ice cream composition of claim 4, containing chocolate in the amount of about 23.0 to 23.5 grams of cocoa powder per liter of ice cream.
9. The ice cream composition of Claim 4, wherein said Cream and Skim Milk provide a total butterfat content in the amount of 8.0 to 9.5 wt. %, said Cream is present in the amount of about 26.73 to 15.30 wt. %, and said Skim Milk is present in the amount of about 56.73 to 64.86 wt. %.
10. The ice cream product of claim 4, containing Vanilla Extract in the amount of 19.8 to 22.4 ml per liter of ice cream.
11. The ice cream composition of Claim 4 having an overrun in the range of about 80 to 110 volume %.
12. The ice cream composition of claim 4 having a Total Carbohydrate content of less than 16.1 wt.%, and a calorie content of less than 1.8 calories per gram.

13. The ice cream product of Claim 4 having a Glycemic Index of less than 34.
14. The process of making low carbohydrate unflavored ice cream comprising:
  - 1) introducing into Skim Milk at a temperature in the range of about 31.1 to 48.9 °C. the following ingredients to produce a basic ice cream mix: Whey Protein Concentrate, Nonfat Dry Milk Solids, Egg Yolk Solids, Polydextrose, Glycerin, CC305, Lo Han Kuo Extract and Sucralose Liquid, and Cream ,wherein said Lo Han Kuo Extract is a Mogroside sweetener made from Momordica fruit and is provided as powdered extract comprising at least 80 wt. % Mogroside and in the amount of about 0.014 to 0.018 wt %, and the Sucralose in said Sucralose Liquid has the chemical formula of C<sub>12</sub> H<sub>19</sub> O<sub>8</sub> Cl<sub>3</sub> , and said Sucralose Liquid is provided in the amount of about 0.072 to 0.080 wt %, and said CC305 stabilizer comprises a mixture of Carragenan, Guar Gum and Locust Bean Gum and is provided in the amount of about 0.230 to 0.270 wt %;
  - 2) pasteurizing the basic ice cream mix from (1) at a temperature of about 82.3 deg. C. for 60 – 80 seconds;
  - 3) homogenizing the pasteurized ice cream mix from (2) in two stages within 8-12 seconds, wherein the first stage takes place at a temperature in the range of about 46.1 to 51.7° C. and a pressure in the range of about 33.3 to 36.8 kg per square cm and the second stage takes place at a temperature in the range of about 46.1 to 51.7 °C. and a pressure in the range of about 86.50 to 95.60 kg per square cm.;

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(Continuation of Claim 14)

- 4) holding the homogenized ice cream mix from (3) at a temperature in the range of about 4.4 to 7.2 °C. at atmospheric pressure for about 12 to 48 hours; and,
- 5) cooling the ice cream mix from (4) to a temperature in the range of about -3.3 to -1.1 °C. while aerating and whipping, thereby producing ice-cream with a volume increase in the range of about 80-110 % greater than the volume of said basic ice cream mix from step (4).
15. The process of claim 14 provided with the step of mixing a flavor other than chocolate with the homogenized ice cream from step (3), or alternatively for chocolate flavor , mixing cocoa powder with the basic ice cream mix from step (1)
16. The Sucralose Liquid in claims 1, 4, and 14 buffered to a pH of about 4.4 and containing a preservative.
17. A low carbohydrate unflavored basic ice cream composition comprising the following ingredients in wt. % ;

Ingredients	Range	Best Mode
Lo Han Kuo Extract	0.014 – 0.018	0.016
Sucralose Powder	0.018 – 0.020	0.019
CC 305	0.200 - 0.270	0.235
Glycerin	0.900 - 1.100	1.00
Polydextrose	9.059 – 10.110	9.582
Whey Protein Concentrate	1.550 – 1.620	1.585
Egg Yolk Solids	2.000 - 3.500	2.750
Non Fat Dry Milk Solids	2.800 –3.200	3.000
Cream and Skim Milk	83.464 – 80.162	81.813

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18. The ice cream composition of claim 17 containing flavoring in the amount of about 4.8 to 22.4 ml per liter of basic ice cream mix..
19. The ice cream composition of claim 17 wherein said Cream and Skim Milk provide a total butterfat content in the amount of 8.0 to 9.5 wt. %, said Cream is present in the amount of about 26.73 to 15.30 wt.%, and said Skim Milk is present in the amount of about 56.73 to 64.86 wt. %.
20. The ice cream composition of claim 17 having a Total Carbohydrate content of less than 16.1 wt. %, a calorie content of less than 1.8 calories per gram, and a Glycemic Index of less than 34.
21. A low carbohydrate powdered sweetener comprising the following ingredients in wt. %;

Ingredient	Range	Best Mode
Lo Han Kuo Extract	45.6 – 45.8	45.7
Sucralose Powder	54.4 – 54.2	54.3

wherein said Lo Han Kuo Extract is provided as a powder comprising at least 80 wt.% of Mogracide made from Momodica fruit and said Sucralose Powder comprises 99.9 wt. % of Sucralose having the chemical formula of C<sub>12</sub>H<sub>19</sub>O<sub>8</sub>Cl<sub>3</sub>.

22. The sweetener of claim 21 for the sweetening of a product selected from the group consisting of ice cream, baked goods, candy , and beverages.
23. A cane sugar-free sweetener comprising the following in wt. %:

Ingredient	Range	Best Mode
Lo Han Kuo Extract	2.74 - 1.83	2.29
Sucralose Powder	3.26 - 2.17	2.71
Polydextrose	94.00 – 96.00	95.00

24. The sweetener of claim 23 wherein said Lo Han Quo extract is a powder comprising at least 80 wt. % Mogroside made from Momordica fruit, and said Sucralose Powder comprises 99.9 wt. % of Sucralose micronized powder having the chemical formula C<sub>12</sub> H<sub>19</sub> O<sub>8</sub> Cl<sub>3</sub>.
25. The sweetener of claim 23 for sweetening beverages.
26. The process of making low carbohydrate unflavored ice cream comprising:
  - 1) introducing into Skim Milk at a temperature in the range of about 31.1 to 48.9 °C. the following ingredients to produce a basic ice cream mix: Whey Protein Concentrate, Nonfat Dry Milk Solids, Egg Yolk Solids, Polydextrose, Glycerin, CC305, Lo Han Kuo Extract and Sucralose Powder, and Cream ,wherein said Lo Han Kuo Extract is a Mogroside sweetener made from Momordica fruit and is provided as powdered extract comprising at least 80 wt. % Mogroside and in the amount of about 0.014 to 0.018 wt %, and the Sucralose Powder comprises 99.9 wt. % Sucralose having the chemical formula of C<sub>12</sub> H<sub>19</sub> O<sub>8</sub> Cl<sub>3</sub> and is provided in the amount of about 0.072 to 0.080 wt %, and said CC305 stabilizer comprises a mixture of Carragenan, Guar Gum and Locust Bean Gum and is provided in the amount of about 0.230 to 0.270 wt %;
  - 2) pasteurizing the basic ice cream mix from (1) at a temperature of about 82.3 deg. C. for 60 – 80 seconds;
  - 3) homogenizing the pasteurized ice cream mix from (2) in two stages within 8-12 seconds, wherein the first stage takes place at a temperature in the range of about 46.1 to 51.7° C. and a pressure in the range of about 33.3 to 36.8 kg per square cm and the second stage takes place at a temperature in the range of about 46.1 to 51.7 ° C. and a pressure in the range of about 86.50 to 95.60 kg per square cm.;

(Continuation of Claim 26)

4) holding the homogenized ice cream mix from (3) at a temperature in the range of about 4.4 to 7.2 °C. at atmospheric pressure for about 12 to 48 hours; and,

5) cooling the ice cream mix from (4) to a temperature in the range of about -3.3 to -1.1 °C. while aerating and whipping, thereby producing ice-cream with a volume increase in the range of about 80-110 % greater than the volume of said basic ice cream mix from step (4).

27. The ice cream composition of claim 26 containing flavoring in the amount of about 4.8 to 22.4 ml per liter of basic ice cream mix..
28. The ice cream composition of claim 26 wherein said Cream and Skim Milk provide a total butterfat content in the amount of 8.0 to 9.5 wt. % , said Cream is present in the amount of about 26.73 to 15.30 wt.%, and said Skim Milk is present in the amount of about 56.73 to 64.86 wt. %.
29. The ice cream composition of claim 26 having a Total Carbohydrate content of less than 16.1 wt. %, a calorie content of less than 1.8 calories per gram, and a Glycemic Index of less than 34.

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